

*Handy
Guide*



**BLACKHAWK
WRENCHES**

You'll be proud to own

I'LL BE PROUD OF MY BLACKHAWKS

While it costs no more in the long run to own Blackhawk Wrenches — yet, no other brand of Wrench equipment so clearly stamps you leader in your field. The reasons behind this extra **personal** value to you are:

(1) Every major socket wrench development has come from Blackhawk and you automatically share that leadership.

(2) Their extra-utility and design features, just naturally make a good workman **better**.

(3) Their silver-bright finish can be kept permanent—stamping as a modern, or, well-equipped, efficient mechanic!

REASONS

**Buy Blackhawk Wrenches
Salesman!**

— Blackhawk products are sold to the most discriminating Jobbers with high ratings. Every wrench carries a money-back guarantee **plus** the guarantee of the distributor.

— Because the Blackhawk Jobber is a Blackhawk Wrenches.

SOURCE OF SUPPLY — Your agent represents a local institution of good-will. He is not a "one-tomorrow" tool peddler.

PRICE — get a rated business contract with no extra charges and build your business with Blackhawk Jobber.

AVAILABILITY — Wherever you are, it's there. Hundreds of Blackhawk Wrenches. Hundreds of Blackhawk Wrench Salesmen serve every part of the United States, Canada and

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Buy With Confidence . . . Blackhawk Wrenches are GUARANTEED!

All Blackhawk Wrenches are guaranteed against defects in both material and workmanship. Free replacements or repairs will be made on all wrenches that do not stand up to this guarantee.

Replacements, naturally, cannot be made if inspection shows that handles or sockets have been hammered or used with Stillson Wrenches for extra leverage — handles or sockets have been ground thinner or changed in design — sockets have been used on over or under-sized nuts — undue leverage has been exerted — or, that wrenches have been worn out from use or employed for purposes other than intended.

FLAT RATE REPLACEMENTS OF WORN WRENCHES PROTECT YOUR INVESTMENT: — Wrenches which might not get free replacement under the liberal Blackhawk Guarantee, are in many cases still worth money to their owner. Worn or damaged Ratchets, Hinged Offsets and Universal Speeders are repaired and returned on a **FLAT RATE** charge. Blackhawk has systematized this service to supply speedy, economical repairs. Mail damaged wrenches through the Blackhawk Distributor, or **PREPAID** direct to the Blackhawk factory with instructions, your name and return address.

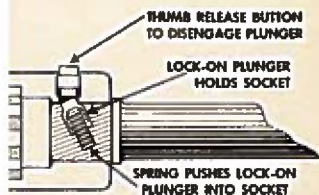
Blackhawk Wrenches for Convenience Thumb-RELEASE LOCK-ON

Blackhawk's
inter-
locks
either
you
the
the
fur-
3/4"
The
is a
h the
series
No.



Patent Nos.
Registered
19,287
1,927,844

TO LOCK THE SOCKET ON THE HANDLE simply line up the "Thumb-Release" button in the socket wall with the "Lock-On" plunger of the handle. They then slide together.



asily slides onto the drive. The
ger in a sure-grip position.

TO RELEASE hold socket and handle as at left — press the "Thumb-Release" button — and pull the socket off the handle. Cross-section above shows why the built-in "Thumb-Release" button can accomplish this action.

LOCK-ON Clicks Sockets, Handles and Attachments Into ONE SOLID TOOL . . .

*. . . Easily Disengaged
by Pressing the "Thumb-
Release" Button!*

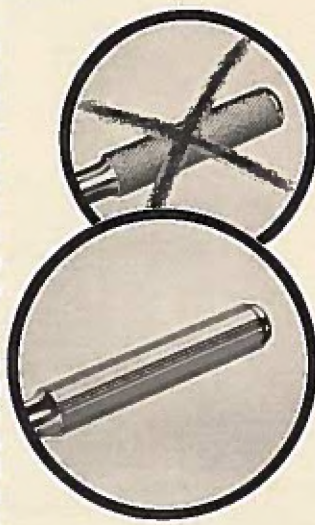
Blackhawk wrenches are not costly — but even if they were, experienced mechanics say they would gladly pay an extra price for the Thumb-Release "Lock-On" feature!

"Lock-On" saves time and temper. Sockets cannot stick in tight places, drop or slip off to cause damage or injury — a safety feature on overhead work or where sockets and attachments would cause extensive damage and loss of time if dropped in mechanism. This patented feature makes work fast, safe and sure. Thumb-Release "Lock-On" should not be confused with ordinary friction-ball grips or set-screw devices. Study the principle of "Lock-On" as described at the left — and for its contribution to your convenience and workmanship, insist that your socket wrenches have this patented feature!

Blackhawk Wrenches Give You GRIPLINE

The exclusive "Grip line" design of Blackhawk handles looks good and has real utility. These "Griplines" are comfortable, give a firm grasp and wipe clean of grease and dirt . . . contrasted with unattractive cross-knurled grips that are hand-cutters and grease-holders.

You pay no penalty in buying Blackhawk wrenches with this modern "Gripline" design. But you gain comfort — and you can keep your wrenches in their original luster for years.



AND HERE'S THE PROOF!

*check all
wrench lines*

Line B	Line C	Line D	Line E	Line F	Line G
**					
YES			YES		YES
YES				YES	YES
	YES			YES	
	YES	YES		YES	YES
					YES
SOME	SOME			YES	SOME
YES					
	YES				
YES	YES	SOME		YES	YES
YES	YES	YES	YES	YES	YES
YES	YES	YES	YES	YES	YES
YES					
YES	YES				

originated by Blackhawk
only on 1" square drive

It's Easy To Understand THE BLACKHAWK NUMBERING SYSTEM!

Spend just a couple of minutes studying this page — and there'll never be a mystery in understanding Blackhawk Wrench numbers! It's the key to quick interpretation of catalog listings and will simplify your ordering and handling of Blackhawk Wrenches.

How To Tell THE DRIVE OF A BLACKHAWK SOCKET WRENCH BY ITS CATALOG NO.

Blackhawk Socket Wrenches are furnished in six series of square drives — one more than any other Wrench manufacturer. Each drive has its own series of numbers as listed below. The first numeral in the identification denotes the drive in "eighths". (Examples: No. 20,000 series — the "2" represents 2/8 or 1/4-inch square drive. No. 30,000 series up to, but not including No. 35,000 series — the "3" represents 3/8 or 3/8-inch square drive.)

20,000 SERIES — 1/4" Square Drive. Listed as "Extra-small" series. Also called "Midget" drive.

30,000 SERIES — 3/8" Square Drive. Listed as "small" series. Can be replaced entirely by the 7/16" Drive "Nugget" series listed below.

35,000 SERIES — 7/16" Square Drive. Listed as "Nugget" Wrenches. Also called "Double-Duty" and the "New Standard" drive. Has same range and utility as must otherwise be secured by paying extra money to own wrenches in both 3/8" and 1/2" drives.

40,000 SERIES — 1/2" Square Drive. Listed as "Standard" Drive. Sometimes called the "Old Standard" because its utility is now completely replaced by the 7/16" "Nugget" drive which also does the job of the 3/8" drive.

60,000 SERIES — 3/4" Square Drive. Listed as "Heavy Duty" Drive.

80,000 SERIES — 1" Square Drive. Listed as "Extra-Heavy Duty" Drive.

How To Tell THE SIZE OF A SOCKET BY THE CATALOG NO.

Now that the numbering system for drives has been explained — here's the equally easy guide to the socket size. The last two numerals tell the size of socket opening (width across flats) in thirty-seconds of an inch. Examples: No. 40125 represents 25/32". No. 30010 represents 10/32" or 5/16".

**TURN THIS PAGE FOR THE
AMAZING STORY ON 7/16"
DRIVE "NUGGETS"**

*Important
-that has
let Wrenches
tears!*

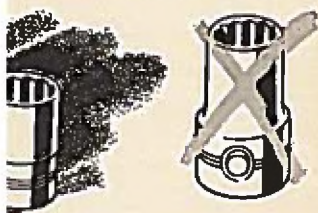
E STEEL NUGGETS

Nugget Socket Wrenches have they are made of — **HEXITE!**

set 13 years ago and used it cause it was the only material stand the grueling work on the fators, Ford, Chrysler and others.

khawk learned the secrets of a cost basis that would warrant mechanics' field.

that it was foolish to think of ches since excess bulk was un-introduced "Nuggets" — with a c of both the $\frac{3}{8}$ " and $\frac{1}{2}$ " series.



**3/8" DRIVE
SOCKET**

in complete sizes from $\frac{1}{4}$ " with and attach- — completely both $\frac{3}{8}$ " series.

**1/2" DRIVE
SOCKET**

of which mechanics once were forced to buy sizes from $\frac{1}{4}$ " to $1\frac{1}{4}$ " with handles (which duplicated many socket sizes and handles in the $\frac{3}{8}$ " series). Now replaced by $\frac{3}{8}$ " drive.

NUGGETS: It costs less to buy $\frac{3}{8}$ " as because one set does the work $\frac{1}{2}$ " series. Be sure to start out mechanics who have used Nuggets the $\frac{3}{8}$ " Double-Duty drive!

WHO ALREADY HAVE

SET: It will pay you to get rid of wrenches and switch to Nuggets! ts and handles in two sets cost would soon equal your in- more efficient Nuggets.

NUGGETS ARE AS STRONG AS 1/2" TOOLS



Diagram above shows cross-sections of a bar of Hexite Steel and a bar of Chrome Vanadium. Although the Hexite bar is $33\frac{1}{4}\%$ smaller, it has the same strength of the larger piece of Chrome Vanadium. That's why Nuggets (made of Hexite) are smaller but equally as strong as $\frac{1}{2}$ " tools made of ordinary high-grade alloy steels.

AS SLIM AS 3/8" TOOLS



Diagram above shows drive ends of smallest sockets in $\frac{3}{8}$ " and $\frac{7}{16}$ " series. Both sockets have same $\frac{1}{4}$ " outside diameter. **PROOF** that Nuggets get in everywhere and replace $\frac{3}{8}$ " series.

LIGHTER THAN 1/2" TOOLS

Because Nuggets are made of Hexite steel, they can be made slimmer and lighter. Nugget handles average 31% lighter than $\frac{1}{2}$ " square drive tools. A 50-piece Nugget Set is 50% lighter and 52% less bulky than a combination set of $\frac{3}{8}$ " and $\frac{1}{2}$ " square drive wrenches of similar utility.



NUGGETS SAVE YOU 42%



Figure it out yourself — add up the cost of handles and sockets in both $\frac{3}{8}$ " and $\frac{1}{2}$ " series. Subtract the total price of Nugget handles and sockets — the difference is YOUR BIG SAVING!

A mechanic would buy 50% MORE TOOLS in $\frac{3}{8}$ " and $\frac{1}{2}$ " series to have the same range of 50 Nuggets. While Nuggets are interchangeable. (Over 23,000 combinations can be made with a 50-piece Nugget set.)

save 42% in COST — they also SAVE TIME because all tools are interchangeable. (Over 23,000 combinations can be made with a 50-piece Nugget set.)

Nuggets not only do the work of $\frac{3}{8}$ " and $\frac{1}{2}$ " wrenches — but actually handle many jobs not adapted to either of the old drives.

How To Pick Out "NUGGETS" from This Book:

$\frac{3}{8}$ " drive Nugget sockets carry identifying numbers in the 35,000 series . . . Handles and attachments are in the 39,000 series . . . and are listed right along with other drives. Nugget sets are shown separately on pages 25 to 31.

RATCHETS

1-Tooth Design



have the radically new Blackhawk ratchet design (patent applied for); head design—Instant reverse—

Length	"Lock-On" Drive
4½"	¼"
7"—9½"	⅜"
18"	¾"
9"	1"

See next page for description.

only for use with No. 89987 long, 1⅝" I.D., 1⅞" O.D.

Sealing Design



ratchets give 212 bites to a circle. See next page.

7"	¾"
9⅝"	⅞"
10½"	1½"

Variable Designs



ratchet wrench—has ¼" square refrigerator valves.

6½"	¾"
-----	----



design—smooth action—Instant

10½"	½"
------	----



Instant reverse. Cadmium plated.

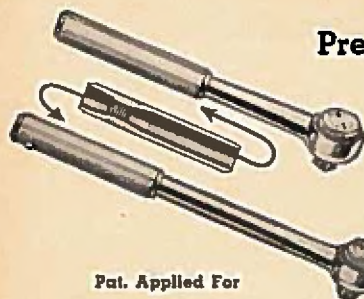
10"	½"
-----	----



heavy duty work. Instantly re-

16"	¾"
20"	1"

EXCLUSIVE FEATURES OF BLACKHAWK RATCHETS



Presto! Chango!

39996 Ratchet has 9½" length for leverage—unscrewing and reversing handle grips gives 7" length for tight places. Really a "Double Duty

Pat. Applied For

Nugget Ratchet"—eliminates need for two ratchets as required in combination ¾" and ½" square drive series. A time saver, that cuts your tool investment, too.

BUILT LIKE A BOX WRENCH

Scientific design of ratchet mechanism in 24991, 39996, and 49996 gives modern mechanics the ideal wrench. Wedge action equalizes strain within head. Teeth are broached into the heat treated alloy forging for unparalleled strength with fine action. Has instant reverse—extremely small head.



212 BITES TO A CIRCLE



The Free Wheeling Ratchets Nos. 34981, 39997, 49997 are for the man who wants the finest action built. Cut-through view shows rollers held in contact by spring backed plunger—free wheeling action gives full utility to every swing—no teeth—noiseless—no back lash—reverses with flick of the wrist.

NDLES

ffset Handles



Offset handles are built to —more power—and eas— appearance—balanced— for all work.

Length	"Lock-On" Sq. Dr.
5 "	1/4"
8 "	3/8"
7 1/4"	1/2"
15 "	1 1/8"
11 3/8"	1 1/2"
15 3/8"	1 1/2"
18 "	1 1/2"
19 "	3/4"

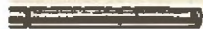
g Offsets



id—stops at each end of
becoming detached and
lower right on next page.

11"	1/2"
18"	3/4"

le Bars



to make T or L wrenches
inged offsets, sliding tees
be used for extra leverage
and ratchets with hollow
andle bars fit handles in
hown.

Length	Used with Handles in this Drive
4"	1/4"
7"	3/8"
9"	1/2"
11"	1 1/2"
18"	3/4"
23"	1 "

EXCLUSIVE FEATURES OF BLACKHAWK OFFSET HANDLES

Triple Duty

Hinged offset handles can be given extra leverage by inserting the proper handle bar in the hollow grips. The cross hole permits use of the same handle bars to make Tee or L Wrenches. Spring backed ball holds drive lug firmly in any position. Useful for breaking nuts loose, running them off or on and for final tightening. Handy on all repair jobs.



Tough as a Wrestler's Neck



The clean cut, efficient design of these offsets makes them the best for real close clearance work. Notice the extremely thin throat — narrow hinge joint — and fine finish. The use of the strongest alloys gives unusual strength with perfect balance.

You should have one in your tool kit for both ordinary and mean jobs.

Two Tools in One

Blackhawk Sliding Tee Handles have a real convenience with the spring-backed ball in the heads. This engages with the groove in center of bar handle to prevent slipping — and makes a firm Tee. The same spring-backed ball holds the head in other positions as well, and prevents it from turning due to the weight of the socket. A definite time saver on heavy work, particularly on overhead jobs.



ENSIONS

Steel—Chromium Plated

reach and adaptability of all out-of-the-way places, Blackhawk give "Lock-On" feature save time of one-piece construction. Attachments come lost or cause damage.

With Revolving Grip



Length	"Lock-On" Sq. D
6"	$\frac{7}{8}$ "
8"	$\frac{1}{2}$ "
10"	$\frac{1}{2}$ "

Grip Handles

down in tight places. No. 34997, T or L handle.

5"	$\frac{1}{4}$ "
5"	$\frac{3}{8}$ "
5 $\frac{7}{8}$ "	$\frac{7}{8}$ "

Extension Bars



or L wrenches with handle bars.

"	39981	$\frac{1}{2}$ "	18"	$\frac{7}{8}$ "
"	49990	$\frac{7}{8}$ "	10"	$\frac{1}{2}$ "
"	69995	$\frac{1}{2}$ "	8 $\frac{1}{2}$ "	$\frac{3}{4}$ "
"	89994	$\frac{1}{2}$ "	17"	$\frac{3}{4}$ "
"	89996	1 $\frac{1}{4}$ "	9"	1"
"	89995	1 $\frac{1}{4}$ "	18"	1"

Sliding Tees

	2"	$\frac{1}{2}$ "
	4"	1"

es—1" square drive are finished in

Cement Drive Lugs

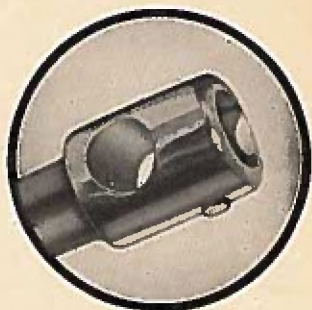
q. Dr.	For use with Ratchet No.
	Old 9811
	916N & 69999
	89999
	Old 911X

EXCLUSIVE FEATURES OF BLACKHAWK EXTENSIONS

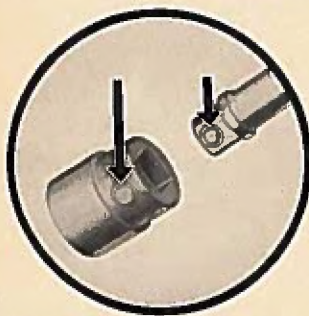
More Than An Extension

Blackhawk extensions do double-duty service — cross hole in head takes handle bar to make either Tee or Ell handles. Spring-backed ball holds bar in all positions firmly.

This construction does away with need for separate Tees or Ells — you make up your own and get more tools for your money.



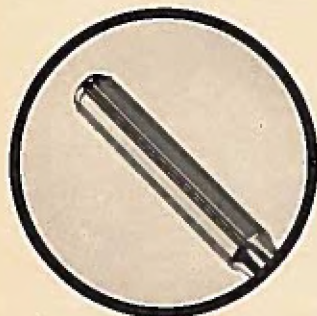
Like a Solid Tool



CLICK! — and it's a rigid assembly. Press the thumb release button (with the slipperiest hands) and it's apart. You can increase the length and usefulness of all Blackhawk tools by combining handles, extensions and sockets to fit any job. No need to buy expensive "specials", when the Lock-On makes all combinations permanent — until you press the thumb release button.

LOCK-ON prevents dropping sockets in assemblies or losing them on the floor. Adds safety when heavy sockets are used overhead.

Easy on the Hands

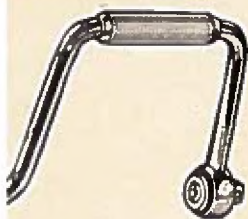


Why blister your hands on old fashioned, hard-to-clean, knurled grips? Gripline handles are built on the principle of modern tires — with the non-skid acting only in the needed direction. Plenty of firm grip for tough pulls, but easily cleaned from the dirtiest job.

Found on Blackhawk ratchets, speeders, extensions, braces, offsets and hinged offsets.

EDERS

Ratchet Brace



o the now famous Double-Duty
r Brace that brings assembly line
r work. Has the Blackhawk
design, with 18 teeth and instant
s 93% with a 4" sweep.
s, 7/8" Square Drive.

e Handles



gth	Shank	Sweep	"Lock-On" Sq. Dr.
3"	7 3/8"	4 "	1 1/8"
4"	6 "	4 3/4"	1 1/2"
"	8 1/2"	4 3/4"	1 1/2"

er Handles



1"	10"	3 3/8"	3/8"
1"	11"	4 3/4"	1/2"

ball end grip. End grip is similar

Ball Handle



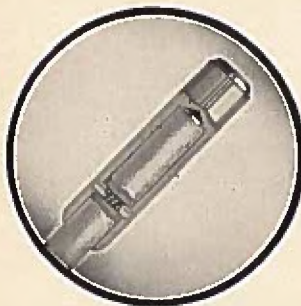
give extra leverage to T or L com-
centrifugal speed-up power for
olts. 8" long overall.
mdle, 7/8" Square Drive.

EXCLUSIVE FEATURES OF BLACKHAWK BRACES AND SPEEDERS

No. 39995 Ratchet Brace (il-
lustrated on previous page)
has the same "Broached-Tooth"
Ratchet design used in regular
Blackhawk Ratchets. This
"Broached-Tooth" design (pat-
ent applied for) permits ex-
tremely small head, only 1 1/4"
diameter—exceptional strength
—instant reverse. It's 7/8"
square drive gives it real
"Double-Duty" utility.



No Stick — No Jam — No Loss!



Further proof of Black-
hawk's quality design
and manufacturing is in
the patented grip con-
struction on brace han-
dles. These never stick,
jam or come off—but
continue to work smooth-
ly and easily for the life
of the tool.

This hidden value is
typical of the way Black-
hawk gives you more
for your money in
wrench equipment.

Hardened Bearings for Smoothness

A Blackhawk Speeder
is always a speeder—
never hindered by a sticky
grip. Arrows indicate the
hardened thrust and
sleeve bearings that pro-
long life—cut down wear
and prevent sticking. Note
how the grip is spun onto
the handle—it can't come
off.



LASH RENCHES

ate - - Simple



Guesswork

same distance every time
the same every time—with-
or use on all automotive,
nably jobs where there are
ghtening of cylinder heads,
plates, etc., can cause un-
motor troubles yield to a

y accurate because Tork-
of alloy spring steel shaft.
on lever devices, dials or

r of design and quantity
every individual mechanic
and be sure of top-notch

o Lengths



—These time proven, de-
and are available in $\frac{7}{8}$ "
ive-In-One Scale (see next
h-pounds. Red and black
rk.

are Drive.

are Drive.



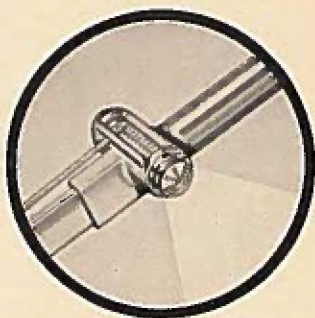
along same sound engi-
er Torkflashes. Its $12\frac{1}{2}$ "
able to aircraft and auto-
num measuring range of
ls. Has special scale for
Available only with $\frac{7}{8}$ "
ed container.

are Drive.

EXCLUSIVE FEATURES OF BLACKHAWK TORKFLASH

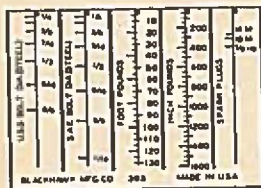
Unique Flash Signal

Just set your Torkflash
pointer to the desired
tension and pull! A
bright flash of light
automatically tells you
when to stop—effective
day or night—no dials
to read—simplicity it-
self. Smash-proof plastic
lens. Ordinary penlight
bulb and battery easily
removed and replaced.
If bulb or battery fail on
the job, wrench can be
read like ordinary types.



Five-In-One Scale

(furnished on Nos. 39975 and 49975)



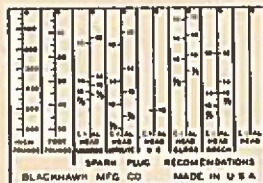
No need to be a mathe-
matician to properly set and
use Blackhawk Torkflash
Tension Wrenches, Nos.
39975 and 49975. Scale has
all "Units of Measure"
found in service and instruc-
tion manuals. Cylinder is
rotated by finger pressure
to show desired scale. When

no tension recommendations in either inch-pounds or foot-
pounds are available—simply determine U.S.S. or S.A.E.
bolt diameter and set pointer accordingly. For checking
pre-set tensions direct—reverse revolving scale unit so
that pointer pulls from zero to tension of bolts. Range up
to 1,600 inch-pounds.

Spark Plug Scale

(furnished on No. 39968)

The special Spark Plug
Scale of the short Torkflash,
No. 39968, operates the
same as the regular Five-
In-One Scale. It is cali-
brated in both inch-pounds
and foot-pounds. Has the
manufacturer's recommend-
ations for Champion, Auto-
Lite, B. G. Corporation,
Globe and American Bosch spark plugs. Recommendations
are given for both cast iron and aluminum cylinder heads.
Range—600 inch-pounds or 50 foot-pounds.



SETS

1/4" Square Drive

Hex Sockets

Socket Size	Socket No.	Socket Size
3/8"	21012	3/8"
1/2"	21014	1/2"
5/8"		

1/2" "Lock-On" Drive

Hex Sockets

Socket Size	Socket No.	Socket Size
7/16"	30020	5/8"
1/2"	30022	3/4"
9/16"	30024	3/4"

3/4" "Lock-On" Drive

Hex Sockets

Socket Size	Socket No.	Socket Size
1/2"	35128	7/8"
3/4"	35130	1 1/8"
1"	35132	1 1/4"
1 1/8"	35134	1 3/8"
1 1/4"	35136	1 1/2"
1 1/2"	35140	1 3/4"

1" "Lock-On" Drive

Hex Sockets

Socket Size	Socket No.	Socket Size
3/4"	40130	1 1/8"
1"	40131	1 1/4"
1 1/8"	40132	1 1/2"
1 1/4"	40134	1 3/4"
1 1/2"	40136	1 7/8"
1 3/4"	40140	2"

1 1/2" "Lock-On" Drive

Sockets

Socket Size	Socket No.	Socket Size
1 1/4"	60052	1 3/8"
1 1/2"	60054	1 1/2"
1 3/4"	60056	1 3/4"
1 7/8"	60058	1 7/8"
2"	60060	2"
2 1/8"	60064	2 1/8"

2" Sq. "Lock-On" Dr.

Sockets

Socket Size	Socket No.	Socket Size
1 3/4"	80082	2 1/8"
1 7/8"	80084	2 3/8"
2"	80086	2 1/2"
2 1/8"	80088	2 3/4"
2 1/4"	80090	2 7/8"
2 1/2"	80092	3"
2 3/4"	80094	3 1/8"
2 7/8"	80096	3 1/4"
3"	80098	3 1/2"
3 1/8"	80100	3 3/4"
3 1/4"	80112	4"

Most Complete Line of Sockets In Standard Production

Electric furnace alloys for strength—hot broached for full chrome plate defeats rust and corrosion. "Lock-On" feature prevents sockets from sticking to nuts, falling into assemblies or getting lost on the job. 1/8", 1/4", 3/8" and 1" square drives all have Thumb-Release button for fast disconnecting.



No. 21006 Series

Left—The 21006 1/4" drive series. Useful on all small work.

Right—Representative double square socket, available from 1/8" to 1 3/8".



Nos. 21106, 30108, 40210 Series



No. 40112 Series

Right—Small 3/8" drive sockets run up to 3/4" in size, are useful in confined places with short 3/8" drive handles.



No. 30008 Series

Left—Standard 1/2" drive sockets run from 3/8" to 1 1/4", will withstand maximum pull of big 1/2" handles.

This Nugget socket will do the work of both 3/8" and 1/2" drive sockets of the same size. Steel is 70% stronger than electric furnace Chrome Vanadium—will outwear 10 to 1. Has strength of 1/2" drive tools, size of 3/8" drive tools. No duplication of sizes means 42% saving in cost over combination sets. See handles on pages 8 to 17.



No. 35110 Series



No. 60028 Series

Heavy duty 3/4" square Lock-On drive—range from 7/8" to 2"—for industrial, tractor, Diesel, bus, truck work, etc.



No. 80034 Series

Extra heavy duty 1" square Lock-On drive sockets—complete range—cadmium plated—for industry and construction.

CKETS

Double Square Sockets

Series— $\frac{1}{4}$ " Square Drive

No.	Socket Size	No.	Socket Size
10	$\frac{1}{8}$ "	21114	$\frac{1}{8}$ "
12	$\frac{3}{8}$ "	21116	$\frac{1}{2}$ "

14" Sq. "Lock-On" Drive

12	$\frac{3}{8}$ "	30116	$\frac{1}{2}$ "
14	$\frac{7}{8}$ "		

16" Sq. "Lock-On" Drive

16	$\frac{1}{2}$ "	35220	$\frac{3}{8}$ "
18	$\frac{7}{8}$ "	35224	$\frac{3}{4}$ "

$\frac{1}{2}$ " Sq. "Lock-On" Drive

20	$\frac{3}{8}$ "	40230	$\frac{1}{8}$ "
22	$\frac{1}{2}$ "	40232	1"
24	$\frac{3}{4}$ "	40234	$1\frac{1}{8}$ "
25	$\frac{3}{8}$ "	40236	$1\frac{1}{8}$ "
26	$\frac{1}{2}$ "	40240	$1\frac{1}{4}$ "
28	$\frac{3}{8}$ "		

$\frac{3}{4}$ " Sq. "Lock-On" Drive

36	$1\frac{1}{8}$ "	60146	$1\frac{7}{8}$ "
40	$1\frac{1}{4}$ "	60152	$1\frac{3}{4}$ "

Heavy Duty Series

Square "Lock-On" Drive

44	$1\frac{3}{8}$ "	81052	$1\frac{3}{8}$ "
46	$1\frac{7}{8}$ "	81058	$1\frac{1}{8}$ "
50	$1\frac{7}{8}$ "	81064	2"

Vail Double Hex Sockets

"Sq. "Lock-On" Drive

8	$\frac{1}{8}$ "	30322	$\frac{1}{8}$ "
10	$\frac{3}{8}$ "	30324	$\frac{3}{4}$ "

16" Sq. "Lock-On" Drive

12	$\frac{1}{8}$ "	35330	$\frac{1}{8}$ "
14	$\frac{3}{4}$ "	35332	1"
16	$\frac{1}{8}$ "	35336	$1\frac{1}{8}$ "
18	$\frac{7}{8}$ "		

Square "Lock-On" Drive

14	$\frac{3}{4}$ "	35530	$\frac{1}{8}$ "
16	$\frac{1}{8}$ "	35532	1"
18	$\frac{7}{8}$ "		

$\frac{1}{2}$ " Sq. "Lock-On" Drive

14	$\frac{3}{4}$ "	40330	$\frac{1}{8}$ "
16	$\frac{1}{8}$ "	40332	1"
18	$\frac{7}{8}$ "	40336	$1\frac{1}{8}$ "

SOCKETS & SETS



30314
Series



35314
Series



40316
Series

NEW! Aero-Type Spark Plug Sockets



35518
Series

To complete and make Nuggets a truly "Double-Duty" and all purpose line—Blackhawk now offers special Aero-Type Spark Plug Sockets, 35518 Series, for automotive and aircraft work. These new sockets have replaceable synthetic rubber inserts to cushion insulators from shock or twist—prevent wasteful damage. Sockets are single hex and shallow broached. Range from $\frac{1}{8}$ " to 1" socket openings. Equipped with patented "Lock-On" and $\frac{1}{8}$ " Double-Duty Drive.

No. 19082 Socket Set

NEW! Five selected spark plug sockets to handle all cars up to and including 1941 models. Extra deep, thin wall double hex $\frac{1}{2}$ " series. Range from $\frac{5}{8}$ " to 1". Packed in strong cardboard box.

Contents: One each Nos. 40320, 40322, 40326, 40328 and 40332.

No. 19082 Spark Plug Socket Set.

Pressed Steel Spark Plug Sockets

No. 3327 For all $\frac{1}{8}$ " hexagon spark plugs.

No. 3329 For all $\frac{7}{8}$ " and 1" hexagon spark plugs.

No. 3731 For all $\frac{1}{8}$ " and $1\frac{1}{8}$ " hexagon spark plugs.

MENTS

nt Sockets

re "Lock-On" Drive

Socket Size	No.	Socket Size
$\frac{1}{8}$ "	30222	$\frac{1}{8}$ "
$\frac{3}{8}$ "	30224	$\frac{3}{4}$ "

get "Lock-On" Drive

Socket Size	No.	Socket Size
$\frac{1}{8}$ "	35422	$\frac{1}{8}$ "
$\frac{3}{8}$ "	35424	$\frac{3}{4}$ "

Joint

of universal joints—stock
clearance—accessibility
length.

Drive	No.	Sq. Drive
$\frac{1}{8}$ "	69993	$\frac{3}{4}$ "
$\frac{1}{2}$ "		

nd Attachments

s	Length	"Lock-On" Sq. Drive
$\frac{1}{8}$ "	1 "	$\frac{3}{8}$ "
$\frac{1}{8}$ "	1 $\frac{1}{4}$ "	$\frac{7}{8}$ "
$\frac{1}{4}$ "	1 $\frac{1}{2}$ "	$\frac{1}{2}$ "
$\frac{3}{8}$ "	3 $\frac{1}{4}$ "	$\frac{3}{8}$ "
$\frac{1}{4}$ "	3 $\frac{1}{4}$ "	$\frac{3}{8}$ "
$\frac{1}{4}$ "	3 $\frac{1}{4}$ "	$\frac{3}{8}$ "
$\frac{1}{4}$ "	3 $\frac{1}{4}$ "	$\frac{7}{8}$ "
$\frac{1}{4}$ "	3 $\frac{1}{4}$ "	$\frac{7}{8}$ "
1	3 $\frac{1}{4}$ "	$\frac{7}{8}$ "
2	3 $\frac{1}{4}$ "	$\frac{7}{8}$ "
3	3 $\frac{1}{4}$ "	$\frac{7}{8}$ "

lease Key

in" Sockets in present $\frac{3}{8}$ "
drive series.

ors

Used on adles to	Male End
rease to	$\frac{1}{8}$ "
rease to	$\frac{1}{2}$ "
rease to	$\frac{3}{4}$ "
rease to	$\frac{7}{8}$ "
rease to	1 "
rease to	1 "
rease to	$\frac{3}{8}$ "
rease to	$\frac{7}{8}$ "
rease to	$\frac{1}{2}$ "
rease to	$\frac{3}{4}$ "
rease to	$\frac{3}{4}$ "
rease to	$\frac{7}{8}$ "
rease to	$\frac{1}{2}$ "

FEATURES OF ATTACHMENTS

More Uses for Your Present Set



Blackhawk Universal Joint Sockets will operate through a full 45° angle and are extremely compact. Internal springs hold socket in any position necessary to get at bolts under fenders, on oil pans, starter motors and other such hard-to-get-at places. "Lock-On" feature makes socket and handle assemblies as good as solid tools — no falling off or sticking in work.

Eleven sizes of screw driver bits for $\frac{3}{8}$ " and $\frac{1}{8}$ " "Nugget" drives. Included are both regular, Phillips, and the rod bits. Very useful on magneto, carburetor, ignition and front end work. Phillips models are good for trim work, headlights and many assemblies.

Alert mechanics find these bits, when used with ratchets, bring real speed to awkward offset screw driver jobs.

Can also be used with speeders, extensions and hinged offsets to get in almost anywhere.



Stud Extractor

New Nugget Stud Extractor and setter. Simplified design with only two parts — provides "pipe wrench" grip on studs. Gear is forced into contact by handle action. Teeth are milled and heat treated. In addition to extreme range, new design functions with gear flat against head or block. Handles $\frac{1}{4}$ " to $\frac{3}{8}$ " studs.

No. 39980— $\frac{7}{8}$ " Square Drive Stud Extractor.

No. 49980— $\frac{1}{2}$ " Square Drive Stud Extractor, handles studs from $\frac{1}{4}$ " to $\frac{3}{4}$ ".

Ratchet Adaptors

Now! Reversible Ratchet Adaptors no bigger than average sockets. Bring real speed to tension wrenches — new close quarter efficiency to speeders, offset and Tee handles. Adaptors have exclusive "Broached-Tooth" ratchet design — minimum outside diameter — instant finger-touch reverse — are equipped with "Lock-On".



No.	Outside Dia.	Overall Length	Number Teeth	Number Paws	"Lock-On" Drive
39967	1 $\frac{1}{8}$ "	1 $\frac{1}{8}$ "	18	1	$\frac{1}{8}$ "
49973	1 $\frac{1}{4}$ "	2 $\frac{1}{4}$ "	18	1	$\frac{1}{2}$ "
69967	2 $\frac{1}{4}$ "	3 $\frac{1}{8}$ "	24	1	$\frac{3}{4}$ "
*89986	2 $\frac{3}{8}$ "	4 $\frac{1}{2}$ "	28	2	1 "

*Cadmium Plated.

THE PLIERS

Pump Pliers



Adjustment with a range from 0 to 2." adaptable for use on water pump adjustments and wherever a service station operator should have thickness of jaws, $\frac{1}{4}$ ".

Pliers.

Universal Pliers



Ideal for a wide range of uses including adjustments on water pumps, head - light terminals, etc. Three position 7". Thickness of jaws, $\frac{3}{8}$ ".

Pliers.

Ignition Pliers



For use on spark plug caps and other small jobs. Three position opening range from 0 to $\frac{3}{8}$ ". Overall length, 5".

Ignition Pliers.

Spring Pliers



Spring Pliers.

Universal Brake Pliers

Universal Brakes.



Universal Brake Pliers.

SELL YOURSELF WITH MODERN WRENCH EQUIPMENT



Be A "Sales-Minded" Mechanic

Today, you have to show people you're good, as well as be that way. The successful mechanic sells himself as well as his work.

People trade with efficient looking shops, where they feel their cars will be serviced correctly, without lost time. When they see the mechanic roll up a DD wrench bench and start to work with every tool at his fingertips, instead of rooting around under the bench, you can figure who gets the business.

Blackhawk has built up complete units of streamlined tools and cases—which serve the double purpose of **SELLING** your work, and helping you do it **FASTER**, more **EFFICIENTLY**.

Realizing that many men will want to buy these on a budget basis, Blackhawk has worked out several means of ownership. Ask your jobber salesman for details.

ET SETS

Wrench & Nugget Set

Here's the "flagship" of the Nugget fleet — the 99DD! Complete with 53 selected double-duty Nuggets in the DD stand — the most practical, ultra-modern portable wrench set ever designed.

The DD stand is a combination wrench cabinet and work table with ample drawer space and a solid $\frac{1}{8}$ " steel work top. Includes adjustable work light, electrical outlets and "disappearing" doors equipped with

SE CAN BE
UNTED HERE



de of heavy-gauge steel with chrome trimmings.

2" deep and 34" high with 3" ers have chromium plated pull ent is roomy for bulky tools, mium plated handle on right rolling stand on its two rubber- with chrome pull handles has l same rigidity as work bench.

Investment

lose to lock up wrenches and ounted on one end of the rein- Blackhawk Engineers "thought D Wrench Bench was designed.

s — Attention!

with these attractive and profit nts. Better tools mean better s count these days when cus- ness to the shop that displays nent.

roduce new business and keep an to point out a well equipped ch chests and stands will more

or Contents of Set.

NUGGET SETS

Nos. 77K and 77L

Here are the sets thousands have bought as their "starter" on Nuggets. 77L includes 26 most essential Nugget wrenches in the CB case. 77K is the same as 77L but includes the remarkable Torkflash tension wrench.

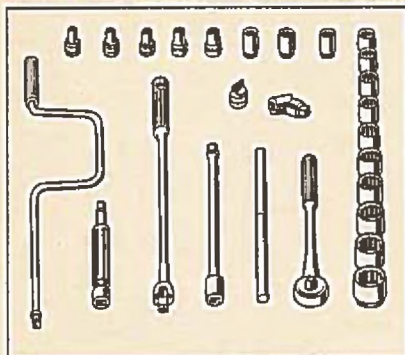
The attractive roomy CB chest has practical drop-cover design. Size 20½" long, 8½" wide, 6½" high. Plenty of extra room for hammers, pliers and other tools—plus later addition of Nugget "fill-ins." Handles all automotive service and is especially ideal for work on Ford and Chevrolet—also serves trucks, modern tractors and industrial machines.

The 26 Nuggets—with their $\frac{1}{2}$ " double duty square drive—do all the work of 41 regular $\frac{3}{8}$ " and $\frac{1}{2}$ " square drive tools (see diagram below). Figure the saving yourself—comparing the attractive 77L price with total cost of $\frac{3}{8}$ " and $\frac{1}{2}$ " tools in ANY quality line.

For List of Wrenches in Set, see Page 29.

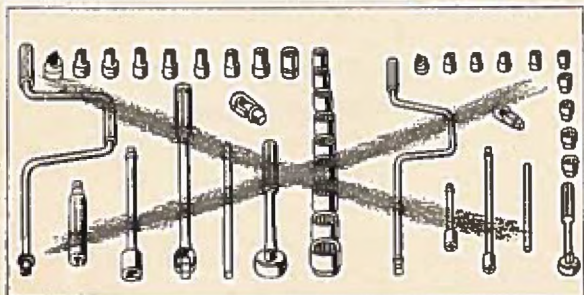
No. 77L Set Complete.

No. 77K Set Complete, (Includes Torkflash).



26 Nuggets
in 77L

Replace 41
Tools in $\frac{3}{8}$ "
and $\frac{1}{2}$ " Drives



ET SETS

Nugget Set



Individual name plate, furnished to tumbler lock.

In No. 19508 Case.

Nugget Set



Thirty piece general utility assortment. Includes double hex, double square and long deep sockets plus 8 basic handles and attachments. Red enameled CA case (size 20 1/4" long x 7 3/8" wide x

ne for these brilliant performers. in CA Case.

Nugget Set



ipment. Furnished in trim red x 1 1/4".

In T Case.

for Contents of Sets.

CONTENTS OF NUGGET SETS

No.	Description	17K	30K	77L	77K	50B	99DD
35110	3/8" Sq'l Hex Sk't	1	1	1	1	1	1
35112	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35114	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35116	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35118	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35119	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35120	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35121	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35122	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35124	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35126	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35128	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35130	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35132	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35134	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35136	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35140	3/8" Db'l Hex Sk't	1	1	1	1	1	1
35212	3/8" Db'l Sq. Sk't	1	1	1	1	1	1
35214	3/8" Db'l Sq. Sk't	1	1	1	1	1	1
35216	3/8" Db'l Sq. Sk't	1	1	1	1	1	1
35218	3/8" Db'l Sq. Sk't	1	1	1	1	1	1
35220	3/8" Db'l Sq. Sk't	1	1	1	1	1	1
35224	3/8" Db'l Sq. Sk't	1	1	1	1	1	1
35314	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35316	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35318	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35320	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35322	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35324	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35326	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35328	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35330	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35332	1/2" Long Db'l Hex Sk't	1	1	1	1	1	1
35336	1 1/4" Long Db'l Hex Sk't	1	1	1	1	1	1
35414	1/2" Univ. Jt. Sk't, Db'l Hex	1	1	1	1	1	1
35416	1/2" Univ. Jt. Sk't, Db'l Hex	1	1	1	1	1	1
35418	1/2" Univ. Jt. Sk't, Db'l Hex	1	1	1	1	1	1
35420	1/2" Univ. Jt. Sk't, Db'l Hex	1	1	1	1	1	1
35422	1/2" Univ. Jt. Sk't, Db'l Hex	1	1	1	1	1	1
35424	1/2" Univ. Jt. Sk't, Db'l Hex	1	1	1	1	1	1
39965	Screw Driver, .035" x 1 1/4"	1	1	1	1	1	1
39966	Screw Driver, .040" x 1 1/4"	1	1	1	1	1	1
39971	Screw Driver, No. 2 Phillips	1	1	1	1	1	1
39972	Screw Driver, No. 3 Phillips	1	1	1	1	1	1
39975	Torkflash Tension Wrench	1	1	1	1	1	1
39976	Grip Handle, 5 1/4" long	1	1	1	1	1	1
39977	Speed Ball Handle, 8" long	1	1	1	1	1	1
39978	Universal Joint	1	1	1	1	1	1
39979	Drag Link Socket	1	1	1	1	1	1
39981	18" Extension	1	1	1	1	1	1
39982	3" Extension	1	1	1	1	1	1
39983	6" Extension Bar	1	1	1	1	1	1
39984	Hinged Offset, 7 1/4" long	1	1	1	1	1	1
39985	Hinged Offset, 15" long	1	1	1	1	1	1
39986	Handle Bar	1	1	1	1	1	1
39990	10" Extension Bar	1	1	1	1	1	1
39998	Two-Length Ratchet	1	1	1	1	1	1
39997	Free Wheeling Ratchet	1	1	1	1	1	1
39999	Brace, 16" long	1	1	1	1	1	1



ON SETS

DS and 74R Sets

Here is Wrench equipment for the aviation mechanic — designed for faster, easier work in close quarters. Sets were made up after extensive and thorough research by Blackhawk Engineers, and include socket sizes and designs specifically developed for aircraft as

work.

around famous double-duty Nugget—which eliminate duplication of drive sets and save you up to 50%. All Nugget wrenches have "Click-On" feature, which prevents dropping into assemblies—yet our thumb.

sets all contain the same number of sockets—and in addition, have the extra set for the more intricate work. Also included in these three sets are Type spark plug sockets with 1/2" Hex socket for No. 8 Machine

the smart DD Wrench bench design, the Wheeled DS stand shown, and the streamlined and compact R

DD Stand.

DS Stand.

R Case.

4CA Set

Here is just the set for young mechanics and apprentices that are interested in getting the necessary wrenches for a starter at a minimum cash outlay. Contains the five most vital handles and attachments and nine essential sockets—complete in radiant red additions to the Nugget family.

CA Case.

No. Description 14CA 74R 74DS 74DL

Handles and Attachments

24995	Grip Handle				
24996	Extension				
24997	Handle Bar				
24999	Hinged Offset				
39965	Regular Screw Driver				
39966	Regular Screw Driver				
39976	Grip Handle				
39981	18" Extension				
39982	3" Extension				
39983	6" Extension				
39985	15" Hinged Offset				
39986	Handle Bar				
39990	10" Extension				
39996	Two-Length Ratchet				
39999	Brace				
N-5	Plastic Case				

1/4" Square Drive Sockets

21006	1/4" Single Hex				
21007	1/4" Single Hex				
21008	1/4" Single Hex				
21009	1/4" Single Hex				
21010	1/4" Single Hex				
21011	1/4" Single Hex				
21012	1/4" Double Hex				
21014	1/4" Double Hex				

7/16" Square Drive Sockets

35110	7/16" Single Hex				
35111	7/16" Single Hex				
35112	7/16" Double Hex				
35114	7/16" Double Hex				
35116	7/16" Double Hex				
35118	7/16" Double Hex				
35120	7/16" Double Hex				
35122	7/16" Double Hex				
35124	7/16" Double Hex				
35126	7/16" Double Hex				
35128	7/16" Double Hex				
35130	7/16" Double Hex				
35132	7/16" Double Hex				
35134	7/16" Double Hex				
35136	7/16" Double Hex				
35140	7/16" Double Hex				

Long Spark Plug Sockets

35314	7/8" Double Hex				
35316	1/2" Double Hex				
35318	1/2" Single Hex				
35320	1/2" Single Hex				
35322	1/2" Single Hex				
35324	1/2" Single Hex				
35326	1/2" Single Hex				
35328	1/2" Single Hex				
35330	1/2" Single Hex				
35332	1/2" Single Hex				

Universal Joint Sockets

35412	3/4" Double Hex				
35414	1/2" Double Hex				
35416	1/2" Double Hex				
35418	1/2" Double Hex				
35420	3/4" Double Hex				
35422	1/2" Double Hex				
35424	3/4" Double Hex				

Half and Halls

15641	1/2" Single Hex				
15642	1/4" Single Hex				
15643	1/2" Single Hex				
15644	1/2" Single Hex				
15645	1/2" Single Hex				
15646	3/8" Single Hex				

Short Box Types

15612	3/4" - 7/8"				
15613	1/2" - 5/8"				
15614	5/8" - 1 1/8"				

Long Box Types

15625	3/4" - 1 1/8"				
15626	1 1/8" - 1 3/8"				
15627	1 3/8" - 1 7/8"				

Hexite Open Ends

4721	1/2" - 3/8"				
4725	1/2" - 1/4"				
4727	1/2" - 3/8"				
4730A	1/2" - 1/4"				
4731A	3/4" - 7/8"				
4033C	1 1/8" - 1"				

CH SETS

echanic Sets

Modern Inside and Out

These modern, well designed R and W cases keep your tools in one place—eliminates costly "tool-hunting"—your tools are where you want them when you want them. Finished in beautiful red with chrome drawer handles and trimmings. R Case illustrated at left—W case shown below.

The big tool as the 70R, 90R and 100W (either the most superb matched assortment the master mechanic can buy, all popular drives—plus all im-

in R Case.
in R Case.
in W Case.

Construction Wrench Set

A complete and approved tractor and construction wrench set. Patterned after a set that Blackhawk has been furnishing one of the major tractor manufacturers for years. Will handle all of the major jobs on popular tractor models or contractors' equipment. Made up of famous double-duty Nuggets—

Investment— $\frac{3}{4}$ " drive sockets
lexite Open ends and Box Types
nt red, ultra modern W case.
e for extras.

W Case.

35 for Contents of Set.

WRENCH SETS

New Master Mechanic Set

The Red Rover—Model 100DS



Here's a "natural" for the efficient shop. Scoot the Red Rover to the job and you have all tools and necessary equipment at your finger-tips. Customers will know they are served by a top-notch mechanic who does not run up a time-charge by walking around the shop to find scattered tools.

A great time saver for industrial maintenance men who must move all their tools and equipment to any spot in the plant.

This rolling workshop comes with assortment of 100 selected Blackhawk tools in its fine roomy drawers. The DS Stand is $32\frac{1}{2}$ " high, $30\frac{1}{2}$ " wide and $17\frac{1}{4}$ " deep. All drawers slide on rollers. Black ribbed-rubber matting on top prevents case or tools from marring finish. Double-doors with a built-in glove compartment type lock makes it a beautiful, fully enclosed stand.

Rubber-tired casters glide the Red Rover over any floor—silently and easily. Drawers have subdivided interiors for keeping sockets and handles in order. This sturdy, welded-steel stand wheels tools and other equipment right to the job, saving countless trips to distant work benches.

There's no surer way to perform better work, get in solid with the customers and cinch your job than to own one of these glorious, complete wrench sets.

No. 100DS Set Complete in DS Stand.

See Pages 34 & 35 for Contents of 100DS.

Contents of Sets—(Con't.)

TOOLS IN SETS:

52W	70R	90R	100W 100DS
-----	-----	-----	---------------

in. 1/4" Square Drive

[illegible]

Square "Lock-On" Drive

[illegible]

• Square "Lock-On" Drive

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100

■ Square "Lock-On" Drive

This image shows a blank, aged, cream-colored page, likely an endpaper or flyleaf from an old book. The paper has a slightly textured appearance with some minor discoloration and faint vertical lines running down the page. A small, dark, circular spot is visible near the bottom center of the page. The edges of the page are slightly irregular, and there are some faint, dark markings along the right edge, possibly from the binding or scanning process.

(on next page)

TOOLS IN SETS:

52W	70R	90R	100W 100DS
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No.	Description
-----	-------------

Standard Series, 1/2" Square "Lock-On" Drive

40134	1 1/4"	Double Hex Socket	1	1
40212	3/8"	Double Square Socket	1	1
40214	7/8"	Double Square Socket	1	1
40216	1 1/2"	Double Square Socket	1	1
40218	1 3/4"	Double Square Socket	1	1
40220	2"	Double Square Socket	1	1
40224	3/4"	Double Square Socket	1	1
40316	1 1/2"	Long Db'l Hex Sk't	1	1
40318	1 3/4"	Long Db'l Hex Sk't	1	1
40320	3/8"	Long Db'l Hex Sk't	1	1
40324	3/4"	Long Db'l Hex Sk't	1	1
40326	1"	Long Db'l Hex Sk't	1	1
40328	7/8"	Long Db'l Hex Sk't	1	1
40332	1 1/8"	Long Db'l Hex Sk't	1	1
40336	1 1/4"	Long Db'l Hex Sk't	1	1

Heavy Duty Series, 3/4" Square "Lock-On" Drive

Part No.	Description	QTY	Unit Price	Total Price	QTY	Unit Price	Total Price
69987	Ratchet	1	1.00	1.00	1	1.00	1.00
69995	8 1/2" Extension	1	1.00	1.00	1	1.00	1.00
69996	Handle Bar	1	1.00	1.00	1	1.00	1.00
69997	18" Sliding Offset	1	1.00	1.00	1	1.00	1.00
69998	Hinged Offset	1	1.00	1.00	1	1.00	1.00
60034	1 1/2" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60036	1 1/4" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60040	1 1/4" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60042	1 1/4" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60044	1 3/4" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60046	1 3/4" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60048	1 1/2" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60052	1 5/8" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60054	1 1/2" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60056	1 3/4" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60058	1 1/2" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60060	1 1/2" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00
60064	2" Db'l Hex Sk't	1	1.00	1.00	1	1.00	1.00

Short Double Offset Box-Type Wrenches

Part No.	Size	Material	Hex	1	2	3
15612	3/8" & 1/2"	Double Hex	1	1	1	1
15613	1/2" & 3/4"	Double Hex	1	1	1	1
15614	3/8" & 1/2"	Double Hex	1	1	1	1

Long Double Offset Box-Type Wrenches

15623	$\frac{1}{2}$ "	$\frac{5}{8}$ "	Double Hex	1	—	—
15624	$\frac{1}{2}$ "	$\frac{5}{8}$ "	Double Hex	—	—	—
15625	$\frac{3}{4}$ "	$\frac{5}{8}$ "	Double Hex	—	1	1
15619	$\frac{3}{4}$ "	$\frac{5}{8}$ "	Double Hex	1	—	—
15626	$\frac{1}{2}$ "	$\frac{5}{8}$ "	Double Hex	—	1	1
15627	$\frac{1}{2}$ "	$\frac{5}{8}$ "	Double Hex	—	—	1
15629	$\frac{1}{2}$ "	$\frac{5}{8}$ "	Double Hex	1	—	—
15630	$\frac{1}{2}$ "	$\frac{5}{8}$ "	Double Hex	1	—	—

Tappel Open-End Wrenches

422	1 1/2"	6	3/8"	Tappel	Wrench	2	—	2	2
424	3/8"	6	1/8"	Tappel	Wrench	2	—	2	2
426	3/4"	6	7/8"	Tappel	Wrench	2	—	2	2

Open-End Wrenches

4720	$\frac{1}{4}$ "	&	$\frac{1}{8}$ "	O. E.	Wrench	1	—	—
4721	$\frac{1}{4}$ "	&	$\frac{1}{8}$ "	O. E.	Wrench	—	—	—
4723	$\frac{3}{8}$ "	&	$\frac{1}{2}$ "	O. E.	Wrench	—	1	1
4725	$\frac{1}{4}$ "	&	$\frac{1}{8}$ "	O. E.	Wrench	1	—	—
4725B	$\frac{1}{4}$ "	&	$\frac{1}{8}$ "	O. E.	Wrench	1	1	1
4727	$\frac{1}{4}$ "	&	$\frac{1}{8}$ "	O. E.	Wrench	—	—	—
4730A	$\frac{1}{4}$ "	&	$\frac{1}{8}$ "	O. E.	Wrench	1	—	1
4731A	$\frac{3}{8}$ "	&	$\frac{1}{2}$ "	O. E.	Wrench	1	1	1
4033C	$\frac{1}{4}$ "	&	$\frac{1}{8}$ "	O. E.	Wrench	—	—	1
4737	$\frac{1}{8}$ "	&	$\frac{1}{4}$ "	O. E.	Wrench	1	—	—

Ignition Open-End Wrenches

H10	1/2" & 7/8"	Ignition Wrench	...	—	—	1	1
H12	1/4" & 3/8"	Ignition Wrench	...	—	—	1	1
H14	1/2" & 1 1/8"	Ignition Wrench	...	—	—	1	1
H16	3/8" & 1 1/8"	Ignition Wrench	...	—	—	1	1

NUGGIES

re Wrench Sets



brand new NUGGIES—the thin-nidget $\frac{1}{4}$ " drive wrenches ever trick—look at those trim, slim enough sockets, the startling new type sextet. Yes sir—Nuggies or, magneto, ignition and other

o $\frac{1}{8}$ "—made of famous Hexite construction as their big Nugget hinged Offset, Handle Bar, Insu-ension Bar.

openings $\frac{3}{8}$ " to $\frac{3}{4}$ ", the neat- the market—they're patterned d Hexite Open-Ends.

assortment of $\frac{1}{4}$ " series tools is and black plastic case fitted with right size for carrying in your

Contents

24997 Handle Bar
24996 Extension Bar
24995 Grip Handle
15641 $\frac{3}{8}$ " Half & Half
15642 $\frac{1}{2}$ " Half & Half
15643 $\frac{5}{8}$ " Half & Half
15644 $\frac{3}{4}$ " Half & Half
15645 $\frac{7}{8}$ " Half & Half
15646 $1\frac{1}{8}$ " Half & Half
3 $\frac{3}{8}$ " wide, $1\frac{1}{8}$ " high.

n N-5 Case.

Contents

21011 $\frac{1}{4}$ " Single Hex Sk't
21012 $\frac{3}{8}$ " Db'l Hex Sk't
21014 $\frac{1}{2}$ " Db'l Hex Sk't
24999 Hinged Offset
24997 Handle Bar
3 $\frac{3}{8}$ " wide, $1\frac{1}{8}$ " high.

n N-5 Case.

No. 24991 $\frac{1}{4}$ " drive ratchet.
5738 $\frac{1}{2}$ " half & half.

WRENCH SETS

General Utility—30CD



A good all around assortment for general work. Packed in red enameled CA Case. 20 $\frac{1}{2}$ " long, 7 $\frac{3}{8}$ " wide, 5 $\frac{1}{2}$ " high. All units are chrome plated and have standard $\frac{1}{2}$ " square "Lock-On" drive. In neat appearance and range this set is all any mechanic could

desire. A great favorite for work on construction machinery, tractors and other farm implements.

No. 30CD Set Complete in CA Case.

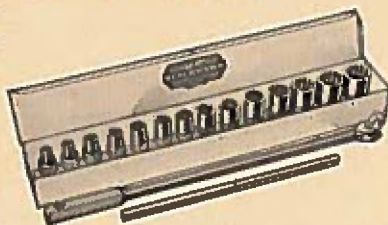
17TD and 13PD Sets

17TD has complete range of thin wall sockets. Packed with hinged offset and handle bar in red enameled "T" case, 18 $\frac{1}{4}$ " long, 12 $\frac{3}{4}$ " wide, 1 $\frac{1}{8}$ " high.

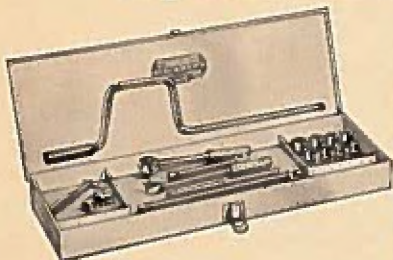
13PD is similar with four less sockets and shorter hinged offset. In general use around service stations, or as emergency kits in trucks and buses.

No. 17TD Set Complete in T Case.

No. 13PD Set Complete in T Case.



Repair Service—16QD



A complete set of thin wall $\frac{3}{8}$ " "Lock-On" drive sockets and proper handles, including "Free Wheeling" ratchet. For close work up to $\frac{3}{4}$ " nut sizes on modern cars and planes. (For greater range in close work see Nugget

sets on pages 26 to 29.) Oil burner, air conditioning and refrigerator service repair men buy this handy set. Packed in red enameled Q case—20" long, 6 $\frac{3}{4}$ " wide and 1 $\frac{1}{8}$ " high.

No. 16QD Set Complete in Q case.

See Page 39 for Contents of Sets.

CH SETS

Duty Set—12SD



Mechanics in industry and construction, truck and bus shops endorse this handy set of heavy duty wrenches. No chance of sockets slipping off, all units have 9/16" Square "Lock-On" drive. Set packed in CA case, 20 1/2" long, 7 3/8" wide, 5 1/2" high.

CA Case.

Duty Set—14BD



The most popular set of powerful heavy duty handles and sockets for repair and assembly of mine equipment, industrial machinery, trucks, tractors, combines, farm and power equipment, graders, pavers and other machine units. No chance of socket slipping from handle end for all square "Lock-On" drive. CA

square "Lock-On" drive. CA

CA Case.

Duty Set—12ED



For industrial machinery installation and maintenance. 1" Square "Lock-On" drive for safety, with wide socket range—finished in cadmium. Packed in red enameled case 23 1/2" long, 7" wide, 4 1/4" high, with carrying handle.

E Case.

or Contents of Sets.

Contents of Sets

		TOOLS IN SETS:			
No.	Description	30CD	17TD	13PD	16QD
Small Series, 3/8" Square "Lock-On" Drive					
34981	"Free Wheeling" Ratchet	1			1
34982	18" Speeder			1	
34984	10" Extension			1	
34985	Handle Bar			1	
34986	8" Hinged Offset			1	
34987	5" Extension			1	
34990	Release Key			1	
34993	Universal Joint			1	
30010	1/4" Single Hex Socket			1	
30012	3/8" Double Hex Socket			1	
30014	1/2" Double Hex Socket			1	
30016	5/8" Double Hex Socket			1	
30018	3/4" Double Hex Socket			1	
30020	7/8" Double Hex Socket			1	
30022	1" Double Hex Socket			1	
30024	3/4" Double Hex Socket			1	
Standard Series, 1/2" Square "Lock-On" Drive					
49978	Universal Joint	1			
49979	Tie Rod Bit			1	
49983	6" Extension (with grip)	1			
49984	11 3/4" Hinged Offset			1	
49985	15 1/2" Hinged Offset	1			
49986	Handle Bar		1	1	
49987	10" Extension with Grip	1			
49988	18" Hinged Offset		1		
49992	15 1/2" Brace	1			
49994	18" Speeder	1			
49995	Ratchet				
40112	3/8" Double Hex Socket		1	1	
40114	1/2" Double Hex Socket		1	1	
40116	5/8" Double Hex Socket		1	1	
40118	3/4" Double Hex Socket		1	1	
40119	7/8" Double Hex Socket		1	1	
40120	1" Double Hex Socket		1	1	
40121	1 1/8" Double Hex Socket		1	1	
40122	1 1/4" Double Hex Socket		1	1	
40124	3/4" Double Hex Socket		1	1	
40125	1" Double Hex Socket		1	1	
40126	1 1/8" Double Hex Socket		1	1	
40128	7/8" Double Hex Socket		1	1	
40130	1" Double Hex Socket		1	1	
40132	1 1/8" Double Hex Socket		1	1	
40134	1 1/4" Double Hex Socket		1	1	
40136	1 1/2" Double Hex Socket		1	1	
40214	1" Double Square Socket	1			
40216	1 1/2" Double Square Socket	1			
40218	1 3/4" Double Square Socket				
40220	2" Double Square Socket	1			
		TOOLS IN SETS:			
		12SD	14BD	12ED	
Heavy Duty Series, 3/4" Sq. "Lock-On" Drive					
69994	17" Extension			1	
69995	8 1/2" Extension			1	
69996	Handle Bar		1	1	
69997	Sliding Offset			1	
69998	Hinged Offset	1			
69999	Ratchet			1	
60032	1" Double Hex Socket		1	1	
60034	1 1/4" Double Hex Socket		1	1	
60036	1 1/2" Double Hex Socket		1	1	
60040	1 3/4" Double Hex Socket		1	1	
60042	2" Double Hex Socket		1	1	
60044	1 3/8" Double Hex Socket		1	1	
60046	1 7/8" Double Hex Socket		1	1	
60048	1 1/2" Double Hex Socket		1	1	
60052	1 5/8" Double Hex Socket		1	1	
60058	1 11/8" Double Hex Socket		1	1	
60064	2" Double Hex Socket		1	1	
Extra Heavy Duty Series, 1" Square "Lock-On" Drive					
89995	18" Extension			1	
89996	9" Extension			1	
89997	Handle Bar			1	
89998	Offset Adapter Head			1	
89999	Ratchet			1	
80040	1 1/4" Single Hex Socket			1	1
80046	1 7/8" Single Hex Socket			1	1
80052	1 3/8" Single Hex Socket			1	1
80058	1 11/8" Single Hex Socket			1	1
80064	2" Single Hex Socket			1	1
80070	2 1/8" Single Hex Socket			1	1
80076	2 3/8" Single Hex Socket			1	1

RENCHES

Offset—Long



amous "Hexite Open-Ends"—thinner
rters work and plenty tough. Ac-
tly balanced and neatly finished.

th	No.	Opening	Length
"	15629	1" x 1 1/8"	16 1/4"
"	15630	1 1/8" x 1 1/4"	18 1/4"
"	15629	1 1/4" x 1 3/8"	18 1/2"
"	15630	1 3/8" x 1 1/2"	23"
"	15631	1 1/2" x 2"	24 1/4"
"	15632	2" x 2 3/8"	26"
"	15633	2 3/8" x 2 3/4"	28"

19057 Set

six long double offset box-types
: Nos. 15622, 15623, 15624, 15625,

Offset—Short



that will fit in your pocket—just
manifold nuts; starter, generator,
ountings.

"	15614	3/8" x 1 1/8"	6"
---	-------	---------------	----

19056 Set

ve above short box-types, packed

Head Style



ngl-Heads can be used in places
ance. Provide straight line pull

"	15636	3/8" x 1 1/8"	12 3/4"
"	15637	1" x 1 1/8"	14 1/2"
"	15638	1 1/8" x 1 1/4"	17"
"	15639	1 1/4" x 1 3/8"	17 3/4"

19058 Set

six Angl-Heads: Nos. 15632,
and 15637. Packed in cardboard

BOX WRENCHES

Half & Half Style



Combination open-end and box-type in one wrench. A
handy double-duty wrench for quick adjustments and
tune-up work. Each end has the same size opening, offer-
ing a double attack on stubborn nuts. A real service
station favorite.

No.	Opening	Length	No.	Opening	Length
15647	1 1/8"	5"	15650	5/8"	6 1/8"
15648	1/2"	5 1/4"	15651	1 1/8"	7"
15649	7/8"	5 3/4"	15652	3/4"	8"

No. 19059 Set

Four of the above Half & Halfs packed in cardboard box
Contains Nos. 15647, 15648, 15649 and 15650.

No. 19074 Set

A complete set of Half & Halfs. Contains No. 15647,
15648, 15649, 15650, 15651 and 15652. Packed in card-
board box.

Miniature Half & Halfs



Here's the latest thing in half and halfs. The smallest,
lightest wrenches you've ever twirled. Thin and slim—yet
plenty tough for their size. Same size opening on both ends

15641	3/8"	3"	15645	1 1/8"	4 1/8"
15642	1/4"	3"	15646	3/8"	4 1/8"
15643	5/16"	3 1/2"	15738	1 1/4"	3"
15644	7/16"	3 1/2"			

No. 19086 Set

A set of six of the miniature half and halfs shows above.
packed in cardboard box. Contains Nos. 15641, 15642,
15643, 15644, 15645 and 15646.

Half Moon Types



The wrench every mechanic needs—it sneaks around
corners and in-between or in-between most any place. Just
the wrench for generator and starter mountings, manifolds
or exhaust nuts and other tricky places.

15659	3/8" x 1 1/8"	7 3/4"
15660	1 1/8" x 3/4"	7 3/4"

ENDS

Steel—Cadmium Plated

Uses for industrial, construction, Excellent for rear axle nuts on the pull gives greater leverage. —do not spread—do not burr protrude above nut.

Straight or offset shanks. Shank files for long leverage. All dou-



Right Type

No.	Opening	Use Handle No.
15691	1 3/4"	15744
15692	1 1/2"	15744
15693	1 1/8"	15744
15694	2"	15744
15695	2 1/8"	15744
15696	2 1/4"	15745
15697	2 3/8"	15745
15698	2 1/2"	15745
15699	2 3/4"	15745
15700	2 7/8"	15745
15701	3 1/8"	15745



Offset Type

15721	1 3/4"	15744
15722	1 1/2"	15744
15723	1 1/8"	15744
15724	2"	15744
15725	2 1/8"	15744
15726	2 1/4"	15745
15727	2 3/8"	15745
15728	2 1/2"	15745
15729	2 3/4"	15745
15730	2 7/8"	15745
15731	3 1/8"	15745

Files for Stub-Ends



Assembled Length	Outside Dia.	Inside Dia.
23"	1 1/8"	5/8"
24"	7/8"	1 1/8"
35"	1 1/4"	7/8"
41"	1 1/2"	1"
52 1/2"	1 3/4"	1 1/8"

SERVICE TOOLS

The "Adjusto" No. 151

Adjustable to fit the majority of drain plugs, square or hex, male or female. Used universally on all transmissions, differentials, shock absorbers, gas tanks and vacuum tank drain and filler plugs. Jaws adjustable by a twist of thumb on knurled sleeve—not on handle grip as with ordinary wrenches. 9" length—selected steel—cadmium plated. Adjustable sockets and plugs to fit—hex male plugs, 7/8" to 1 1/2"; square male plugs, 7/8" to 1 1/4"; square female openings, 7/8" to 1".



The "Multi-Plug" No. 152



One piece—handy and compact—fits practically all female plugs on every car. Length, 8"—selected steel—heat treated—cadmium plated.

Has the following sized plugs—7/8", 1 1/8", 3/4", 7/8".

1/2", 7/8", 3/4" square; 7/8" hexagon.

Ford & Mercury Drain Plug Wrench

No. 15798, fits 1939 and later Ford, Mercury and Zephyr's; 2" hexagon opening. 7/8" square opening fits transmission drain and filler plugs in entire Ford group. 10 1/2" offset handle.



Ford Connecting Rod Socket



The No. 35199, a new 7/8" square drive Nugget socket designed for Ford connecting rods. Front of socket is turned down to fit counter bore on rods. Has 7/8" single hex opening.

Ford Connecting Rod Socket

No. 40199, 1/2" square drive socket for all V-8 connecting rods. Has 7/8" double hex opening.



Chevrolet Oil Pan Socket



No. 34992 screw driver socket—fits all Chevrolet oil pans. 3/4" square drive.

THE TOOLS

Rim Wrenches



s that sneak in back of modern
construction takes care of ex-
cess, cadmium plated.
cap remover in one socket.
1 1/8" and 7/8" hexagon.
Puller.
Cap Puller.

type Rim Wrench



anic, tire dealer and service sta-
more of these four-in-one Rim
bell-shaped sockets in 5/8", 3/4",

Rim Wrenches

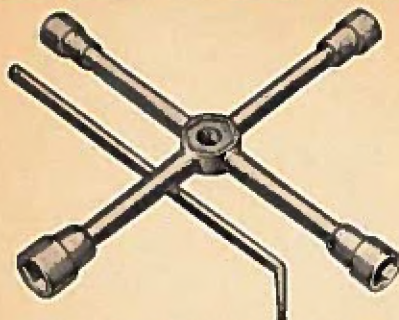


clip all your used cars with qual-
cost. All popular sizes. Thin
ated.

Stock Dia.	Shank Length	Sweep
1/2"	5 3/4"	4 7/8"
1/2"	5 3/4"	4 7/8"
1/2"	5 3/4"	4 7/8"
1/2"	5 3/4"	4 7/8"
1/2"	5 3/4"	4 7/8"

SERVICE TOOLS

Universal Truck Rim Wrench



(Cross Type With 6 Socket Sizes)

Handles 90% of all truck rim nuts. Socket sizes 7/8", 1 1/8", 1 1/4", and 1 1/2" Hex; 1 5/8" and 1 3/4" Square. Back of 1 1/4" Hex Socket is broached 1 1/8" square for AA Ford and Budd-Michelin rims. 5/8" Square broached back of 7/8" Hex, for 31-32 Chev. trucks. Has 23" length—3/4" stock handles—hole in center to receive pry bar.

No. 5206 Rim Wrench only.

No. 5401 Pry Bar only.

Truck and Bus Rim Wrenches



No. 5448—For
Ford AA Trucks,
Budd - Michelin

Wheels, Budd Duals, Dayton Spokesteel Wheels,
change-overs, and deep dual discs.

No. 5440—Has 7/8" hex opening for 1933-34
Trucks, also 1931 and 1932 Chevrolet Trucks. Has
square openings for rear wheel rim studs, and
two hex openings for front and rear wheel rim
nuts.

No. 5434—For all other truck, bus and trailer
rim nuts.

No. 5401—Used as prybar on tough nuts.

No.	Socket Sizes	Stock Dia.	Length
†5448	1 1/8" Sq., 1 1/8" & 1 1/2" Hex	7/8"	16 1/2"
†5440	3/4" Sq., 7/8" & 1 1/4" Hex	7/8"	16 1/2"
†5434	1 1/8" & 1 1/2" Hex	7/8"	16 1/2"
5401	Pry Bar only	3/4"	20"

†Does not include No. 5401 Pry Bar.

Red Cross Rim Wrenches



You can't beat these
sturdy rim wrenches
on any job requiring a
tough pull and plenty

of strength. A handle bar provides extra leverage to
break loose frozen nuts. Ideal for trucks, trailers
and buses. Does not include 15140 handle bar.

No. 15137—For general truck, bus and trailer rim
nuts. Length 16 1/2". Socket openings—1 1/8" and 1 1/2"
Hex.

No. 15138—For Chevrolet trucks. Has square
openings for rear wheel rim studs and Hex for
front and rear rim nuts. Length—16 1/2". Openings
—3/4" sq., 7/8" and 1 1/4" Hex.

No. 15139—For Ford AA trucks—Budd-Michelin,
Budd Duals, Dayton, Spoke-steel, changeovers and
deep dual discs. Length—16 1/2". Openings—1 1/8"
sq., 1 1/8" and 1 1/2" Hex.

No. 15140—Handle Bar for above wrenches. 18" long, 3/4"
stock diameter.

HEXITE

LIGHT AND BULK FOR LEVERAGE LONGER LIFE

Blackhawk-Armstrong Open-Ends are made of HEXITE STEEL — hence their thinner heads; pear-shaped jaws; comfortable, thin handles, lighter weight; better balance and longer wearing qualities. Perfect companions to Nugget Socket Wrenches, also made of Hexite.

BEAUTIFULLY FINISHED

HEXITE Open-Ends sparkle with rich brilliance. Flawless heads are buffed and polished—handles are satin finish. (Ordinary wrenches are usually not polished because high finish emphasizes flaws and defects.)

Each wrench is scientifically heat treated. Openings are accurately milled—and, because of Hexite's hardness, will not round out as easily as ordinary open-ends.

13 HEXITE Open-Ends do the work of 41 odd sizes—saves you 70% on tool outlay—makes work easier and faster.

See next page for complete listings.

OPEN-ENDS

Practical Combinations

HEXITE Open-Ends have size combinations arranged progressively. No improper size combinations and excess weight to retard work and increase tool investment. Following are the 13 Blackhawk-designed Open-Ends—made under the famous Blackhawk-Armstrong trade name:

No.	Milled Openings	Overall Length	Head Thickness
4020	$\frac{1}{4}$ "— $\frac{1}{8}$ "	4 $\frac{1}{4}$ "	$\frac{3}{8}$ "
4721	$\frac{1}{8}$ "— $\frac{3}{16}$ "	4 $\frac{3}{4}$ "	$\frac{11}{16}$ "
4723	$\frac{3}{16}$ "— $\frac{1}{4}$ "	5 $\frac{1}{4}$ "	$\frac{3}{4}$ "
4725	$\frac{1}{4}$ "— $\frac{1}{2}$ "	5 $\frac{3}{4}$ "	$\frac{13}{16}$ "
4725B	$\frac{1}{2}$ "— $\frac{3}{4}$ "	6 $\frac{1}{2}$ "	$\frac{1}{4}$ "
4727	$\frac{3}{8}$ "— $\frac{5}{8}$ "	7 $\frac{1}{4}$ "	$\frac{11}{16}$ "
4729	$\frac{5}{8}$ "— $\frac{3}{4}$ "	8"	$\frac{13}{16}$ "
4028	$\frac{11}{16}$ "— $\frac{13}{16}$ "	8"	$\frac{13}{16}$ "
4730A	$\frac{1}{2}$ "— $\frac{11}{16}$ "	8 $\frac{3}{4}$ "	$\frac{1}{8}$ "
4731A	$\frac{3}{4}$ "— $\frac{7}{8}$ "	9 $\frac{1}{2}$ "	$\frac{7}{8}$ "
4033C	$\frac{1}{2}$ "—1"	10 $\frac{1}{2}$ "	$\frac{11}{16}$ "
4735A	1 $\frac{1}{16}$ "—1 $\frac{1}{8}$ "	11 $\frac{1}{2}$ "	$\frac{11}{16}$ "
4737	1 $\frac{1}{8}$ "—1 $\frac{1}{4}$ "	12 $\frac{1}{2}$ "	$\frac{3}{4}$ "

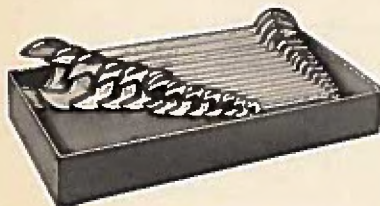
New Hexite Open-End Sets

8CB and 8LR offer the eight most commonly used open-ends. Sets contain one each of the following: Nos. 4723, 4725, 4725B, 4727, 4729, 4028, 4730A and 4731A.



No. 8CB 8 Open-Ends, packed in cardboard box.

No. 8LR 8 Open-Ends, packed in leatherette roll.



13CB and 13LR contain all 13 of the Hexite Open-Ends for complete service on all types of automotive, aviation and industrial equipment.

No. 13CB 13 Open-Ends, packed in cardboard box.

No. 13LR 13 Open-Ends, packed in leatherette roll.

OPEN-ENDS

Wrenches and Sets

These Miniature Wrenches take right out of the stubborn baby. Ideal for every small delicate

	Milled Opening	Length	Thickness of Head
1	$\frac{1}{16}$ " & $\frac{3}{16}$ "	2½"	$\frac{1}{16}$ "
2	$\frac{1}{8}$ " & $\frac{1}{4}$ "	3"	$\frac{1}{8}$ "
3	$\frac{1}{8}$ " & $\frac{1}{2}$ "	3¾"	$\frac{1}{4}$ "
4	$\frac{3}{16}$ " & $\frac{1}{2}$ "	4½"	$\frac{3}{16}$ "
5	$\frac{1}{2}$ " & $\frac{3}{4}$ "	4½"	$\frac{1}{2}$ "

above. In Cardboard Box.
above. In Leatherette Roll.

Wrenches and Sets

The approval of Ignition experts. Made in leatherette case.

No.	Size Opening
E-7	$\frac{1}{2}$ " (¼")
E-8	$\frac{3}{8}$ " & $\frac{1}{2}$ "
E-9	$\frac{1}{2}$ "
E-10	$\frac{3}{8}$ " & $\frac{1}{2}$ "
E-11	$\frac{1}{4}$ " & $\frac{3}{8}$ "

above. In Cardboard Box.
above. In Leatherette Roll.

Tapet Wrenches

ably priced tapets, welcomed by thin—they slip in easily where d of the best alloy steel—and is at 15° angle.

Length	Thickness of Head
8"	$\frac{1}{16}$ "
8"	$\frac{1}{8}$ "
8½"	$\frac{1}{4}$ "
9"	$\frac{1}{2}$ "

of Nos. 422, 424, 426. Packed in
packed in Leatherette Roll.

Tapet Wrenches



These require these long tapet have single end opening. 200AB

15"	$\frac{1}{16}$ "
15"	$\frac{1}{8}$ "
15"	$\frac{1}{4}$ "

NEW "HEXITE" OPEN-ENDS

BLACKHAWK SERVES YOU WITH the only Complete Line of HYDRAULIC JACKS

Blackhawk introduced the first perfected line of Hydraulic Jacks in 1926. Since then Blackhawk has added many refinements and exclusive adaptations of the Hydraulic Jack principle—as described briefly below. Blackhawk Hydraulic Equipment has millions of users in all automotive, industrial, construction, aviation, machinery and other service fields. See complete catalogs for listings and prices.



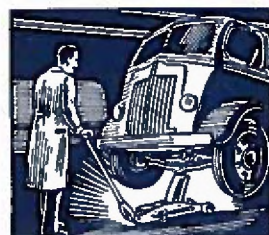
HAND JACKS

1 to 75-tons capacity—exclusive combination of features. Every jack tagged with "Service Proved" seal—your assurance of Dependable, Maintenance-Free Performance.



GAUGE-EQUIPPED & INVERTED JACKS

Only Blackhawk manufactures a complete line of Hydraulic Jacks on which gauges of various diameters can be mounted for portable test-work in field, shop and laboratory. Inverted jacks serve in presses and special machinery applications.



SERVICE JACKS

1½ to 7½-ton capacity. Outstanding features such as built-in spot lights and handle lock. Rugged—dependable, serve every range of road vehicle.



"PORTO-POWER" JACKS

Are exclusive Blackhawk creations. Pump is separated from all-directional ram by high-pressure safety hose. Special attachments harness the ram action to do anything the hand can do—but with tons of power! Capacities from 2 to 50 tons.

BLACKHAWK

World's Largest Manufacturer of Hydraulic Jacks



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